The FoodNet Physician Survey: Implications for Foodborne Disease Surveillance

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Background: The detection of outbreaks and trends in foodborne diarrheal diseases is critically dependent upon physicians who request diagnostic stool tests. However, a population-based evaluation of physician practices for persons with acute diarrhea has not been done in the US.

Methods: In 1996, as part of CDC's Emerging Infections Program, the FoodNet Active Surveillance program conducted a stratified random mail survey of physicians in five states. Data on the physicians practice setting, and the evaluation and characteristics of the last patient seen with diarrhea were analyzed with weighted proportions and logistic regression.

Results: Surveys were returned by 2939 (58%) of 5074 physicians. We analyzed the 1783 surveys from physicians who saw patients more than 8 hours per week and who saw a patient with acute diarrhea in the previous year. Physicians reported they requested a bacterial stool culture from 44% of the last patients seen with diarrhea, and from 53% when diarrhea lasted more than 3 days. Stool cultures were requested from 79% of patients with bloody stools, and 40% of those without bloody stools. In logistic regression patient factors significantly associated with stool culture requests were the presence of bloody stools, a diagnosis of AIDS diarrhea longer than 3 days, travel to a developing country, IV rehydration, and fever. Physicians in Oregon. were less likely to order a stool culture than those in other sites [POR 0.5; 95%CI (0.4-0.7)]. Pediatricians were less likely than other physicians to order cultures from patients with non-bloody stools [pOR 0.3; 95% CI (0.2-0.4)], but as likely as other physicians to request a culture if the stool was bloody. No difference in stool culturing was observed between physicians in managed care and those in fee-for-service practices.

Conclusions: US physician diagnostic practices for patients with diarrhea are described for the first time in this population-based study. Over half of the patients who sought care for diarrhea did not have a stool culture ordered. Factors associated with differing stool culture ordering practices included the physician's specialty, geographic site, and patient clinical characteristics, but not prepayment plans such as managed care. Geographic and between-specialty variability suggests a need for clinical diagnostic guidelines for diarrhea.

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